# TWO NEW SPECIES OF MICTIS LEACH (HETEROPTERA: COREIDAE: MICTINI) FROM SULAWESI

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Abstract.—Two new species of *Mictis* from the Sulawesi Islands are described and illustrated. A key to the known Sulawesian species is included.

Key Words.—Insecta, Hemiptera, Heteroptera, Coreidae, Mictini, Mictis, new species, Sulawesi.

The tribe Mictini occurs only in the Eastern Hemisphere and includes 47 genera (Schuh and Slater 1995). O'Shea and Schaefer (1980) reviewed the generic rank of the tribe Mictini to Asia and Australia, and recognized, described, or redescribed each of the 19 genera from that region. Drawings of head, pronotum, metathoracic scent gland, hind tibia, abdomen, male genital capsule, paramere, and aedeagus, and a key were given. The genus *Mictis* Leach was diagnosed with 18 species and one subspecies and only *M. profana* (Fabricius) was recorded from Sulawesi (Blöte 1938).

The present paper was prompted by the discovery of two new species of *Mictis* from Sulawesi, based on specimens housed in the Zoologische Staatssammlung, Munchen, Germany.

#### KEY TO SULAWESIAN MICTIS

1. Clavus and apical margin of corium yellow, contrasting sharply with the

- 2'. Antennal segments 1 to III black; humeral angle sharply projected laterally; abdominal sternite VII gradually narrowing, not laterally expanded; posterior angle of connexival segments with large and stout conical tubercle; hind tibia with outer surface not dilated, and inner surface with only the distal third expanded; hind trochanter of male with large, robust tubercle (Fig. 1) . . . . . . Mictis riedeli Brailovsky NEW SPECIES

### MICTIS PROFANA (FABRICIUS)

Lygaeus profanus Fabricius, 1803: 211.

This species is widely distributed throughout Australia, Papua New Guinea,

British Solomon Islands, Sumatra, Flores, Timor, Moluccas, Fiji, Samoa, Amboina, and Sulawesi (Celebes) (Blöte 1938, O'Shea and Schaefer 1980). *Mictis profana* (Fabricius) the only previously known Mictini recorded from Sulawesi, is easily recognized by the yellowish markings forming a cross on the closed hemelytra.

# MICTIS RIEDELI BRAILOVSKY, NEW SPECIES (Fig. 1)

Types.—Holotype male: South Sulawesi. Tanah Toraja, Pulu Pulu, 1700 m, 13–16 Aug 1990, A. Riedel. Deposited in Zoologische Staatssammlung Munchen, Germany. Paratypes: 2 males, 2 females; data: same as holotype. Deposited in the Zoologische Staatssammlung Munchen, Germany and Colección Entomológica del Instituto de Biología, UNAM, México.

Description.—Male (holotype). Dorsal coloration: Head black with jugum, tylus, apical margin of antenniferous tubercle and the space between eye and ocelli dark yellow; antennal segments I to IV black; pronotum bright chestnut orange with calli black; scutellum bright chestnut red with apex yellow; clavus and corium reddish-brown with costal border, apical angle, and apical border dark chestnut orange; hemelytral membrane brown with basal angle black; connexival segments and tubercles yellow; dorsal abdominal segments reddish brown with wide yellow longitudinal stripe running through segments II to VI. Ventral coloration: Head black, with buccula and longitudinal stripe running from antenniferous tubercle to posterior border of head yellow; rostral segments I to III yellow with upper face black, and IV with anterior half yellow and posterior half and upper face black; prothorax and acetabulae black with propleura yellow; mesothorax with acetabulae, mesosternum, and posterior margin of mesopleura black with yellow longitudinal stripe running lateral to mesosternum and mesopleura; metathorax orange yellow with acetabulae, and anterior and posterior border of metasternum black; fore and middle leg with coxa and trochanter yellow, femora and tibia yellow with apical third black, and tarsi black; hind leg with coxa and trochanter including the tubercle black, femur orange yellow with basal joint, and apical third including both spines black, tibia orange yellow with apical third and spine black, and tarsus yellow; pleural abdominal sterna III to VII yellow; abdominal sterna III to VII yellow with two longitudinal stripes lateral to middle third reddish brown; tubercles of abdominal sternite III and rim of abdominal spiracle yellow; genital capsule yellow with inner third reddish brown. Structure.—Head: Rostrum reaching middle third of mesosternum. Thorax. Pronotum: Slightly declivent; collar wide; anterolateral border obliquely straight, irregularly spinated or dentate; frontal angles projected forward as conical teeth; humeral angle sharply projecting laterally; posterolateral border sinuate, with upper half nodulose and inner half smooth. Legs: Fore and middle trochanter unarmed; external face of hind trochanter with large and robust tubercle; fore and middle femora relatively slender, ventrally armed with two acute, subapical spines; hind femur markedly incrassate, not attaining the apex of abdomen, reaching at most anterior or middle third of abdominal sternite VI; dorsal and ventral surface minutely tuberculate, ventrally with two large, triangular subapical spines; fore and middle tibia unarmed, sulcate, slightly expanded at posterior third; hind tibia large, recurved, outer surface not dilated and distally with short stout spine, inner surface with distal half expanded, with two spines, the subdistal one large and acute, and the apical one short and stout. Scutellum: Triangular with apex flat. Hemelytra: Macropterous, reaching the apex of last abdominal segment. Abdomen: Gradually narrowing, with abdominal segment VII not laterally expanded; connexival segments sulcate, with upper margin densely and irregularly nodulose and posterior angle of segment III to VI projected on a large and stout conical tubercle; abdominal sternite III armed with a pair of ventrolateral tubercles. Genital capsule: Posteroventral border slightly sinuate at middle third.

Female.—Dorsal coloration: Head black with jugum, tylus, apical margin of antenniferous tubercle and the space between eye and ocelli bright orange red; antennal segments I to III black and IV black with wide orange red ring close to basal third or pale orange yellow with basal joint black, and wide brown ring close to apical third; pronotum bright reddish orange with calli black; scutellum bright reddish orange with apex yellow; clavus reddish-brown with claval vein reddish orange; corium reddish-brown with corial veins, costal border, apical angle, and apical border reddish orange. Ventral coloration: Including legs and rostral segments I to IV bright orange, with following areas black: upper

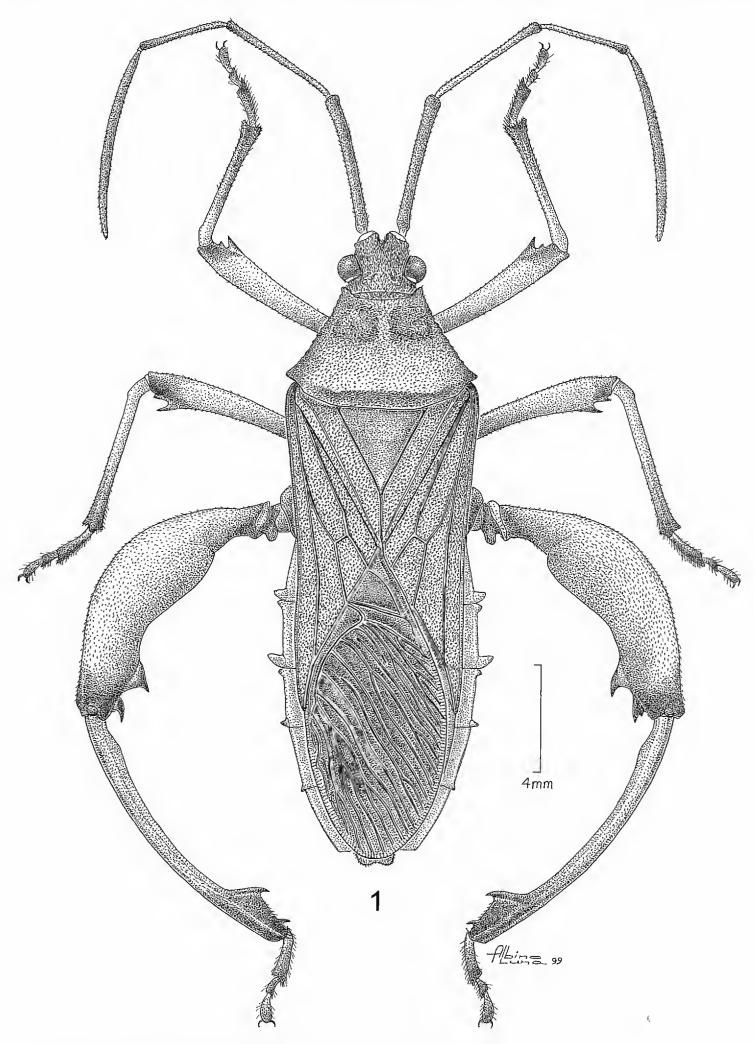


Figure 1. Dorsal view of Mictis riedeli Brailovsky, (male).

face of rostral segments I to IV, apical third of rostral segment IV, lateral longitudinal stripes on mesosternum, scattered discoidal spots on mesocoxa, and apical border of tibia; connexival segments III to VII black with anterior margin reddish orange, and segments VIII and IX reddish brown. *Structure*.—Similar to male. Outer face of hind trochanter unarmed; hind femur incrassate (less than male), ventral surface uniseriately spinated from base to apex, with a large trifurcate subapical spine; hind tibia unarmed, sulcate, and slightly expanded at posterior third; connexival segments with upper face minutely nodulose, and posterior angle of segments III to VI with short and stout spine; abdominal sternite VII without lateral tubercles. Genitalia: Abdominal sternite VII with plica and fissura; gonocoxae I enlarged antero-posteriorly, with external face entire; paratergite VIII triangular, with spiracle visible; paratergite IX squarish, larger than paratergite VIII.

Measurements (based on a single specimen).—Male (female). Head length: 1.90 mm (1.84 mm); width across eyes: 2.81 mm (2.60 mm); interocular space: 1.38 mm (1.38 mm); interocellar space: 0.66 mm (0.63 mm); antennal segments lengths: I, 5.09 mm (5.09 mm); II, 4.10 mm (3.80 mm); III, 2.81 mm (2.96 mm); IV, 6.61 mm (6.46 mm). Pronotal length: 4.71 mm (4.63 mm); width across frontal angles: 2.58 mm (2.66 mm); width across humeral angles: 6.98 mm (6.98 mm): Scutellar length: 3.11 mm (2.88 mm); width: 2.96 mm (3.02 mm). Hind femur length: 10.75 mm (8.50 mm). Hind tibia length: 11.00 mm (8.75 mm). Maximum width of abdomen: 7.44 mm (7.62 mm). Total body length: 23.76 mm (22.50 mm).

Discussion.—This species is most similar to Mictis discolor Dallas with outer surface of hind tibia not dilated, and inner surface with only the distal third expanded (Fig. 1), and both species lack the middle abdominal tubercle between sterna III and IV.

Mictis riedeli is recognized by the antennal segments I to III black, hind trochanter of male with large and robust tubercle, humeral angles sharply projected laterally, abdominal sternite III with pair of robust ventrolateral tubercles, and posterior angle of connexival segments with large conical tubercle (Fig. 1). In M. discolor, recorded from the Philippines, the antennal segments I to III are pale orange yellow, the male hind trochanter blunt without apical tubercle, humeral angles obtuse, abdominal sternite III with sharp tubercle, and the posterior angle of connexival segments without conical tubercle.

Etymology.—Named for Alexander Riedel, collector of the species.

# MICTIS SULAWESIANA BRAILOVSKY, NEW SPECIES (Fig. 2)

Types.—Holotype male: Central Sulawesi. Lake Poso, Pendolo, 21 Aug 1990, A. Riedel. Deposited in Zoologische Staatssammlung, Munchen, Germany.

Description.—Male (holotype). Dorsal coloration: Head and pronotum bright chestnut orange; antennal segments I to IV pale orange yellow; scutellum bright chestnut orange with apex yellow; clavus and corium reddish-brown with costal border, and apical angle chestnut orange; hemelytral membrane brown; connexival segments III to V reddish-brown with anterior border yellow; segments VI and VII with anterior half yellow and posterior half reddish-brown; dorsal abdominal segments reddish-brown, and VII reddish-brown with middle third of posterior margin chestnut orange. Ventral coloration: Bright chestnut orange with dark yellow marks irregularly distributed; anterior and posterior lobe of metathoracic peritreme creamy yellow; rostral segments I to IV yellow with apical third of segment IV black; fore and middle leg pale orange yellow; hind leg chestnut to reddish-brown, trochanter pale orange yellow, apex of tibia black, and tarsus pale yellow; mesosternum laterally, hind acetabulae, abdominal sterna IV and V, and lateral tubercles of sternite III dark reddish-brown; rim of abdominal spiracle yellow. Structure.—Head: Rostrum reaching middle third of metasternum. Thorax. Pronotum: Frontal angle with short conical teeth; humeral angle rounded, not expanded laterally; anterolateral border straight, irregularly spinated; posterolateral border sinuate, with upper half spinated and inner half smooth. Legs: External face of hind trochanter blunt, without tubercle; fore and middle femora relatively slender, armed ventrally with two subapical spines; hind femur markedly incrassate, reaching

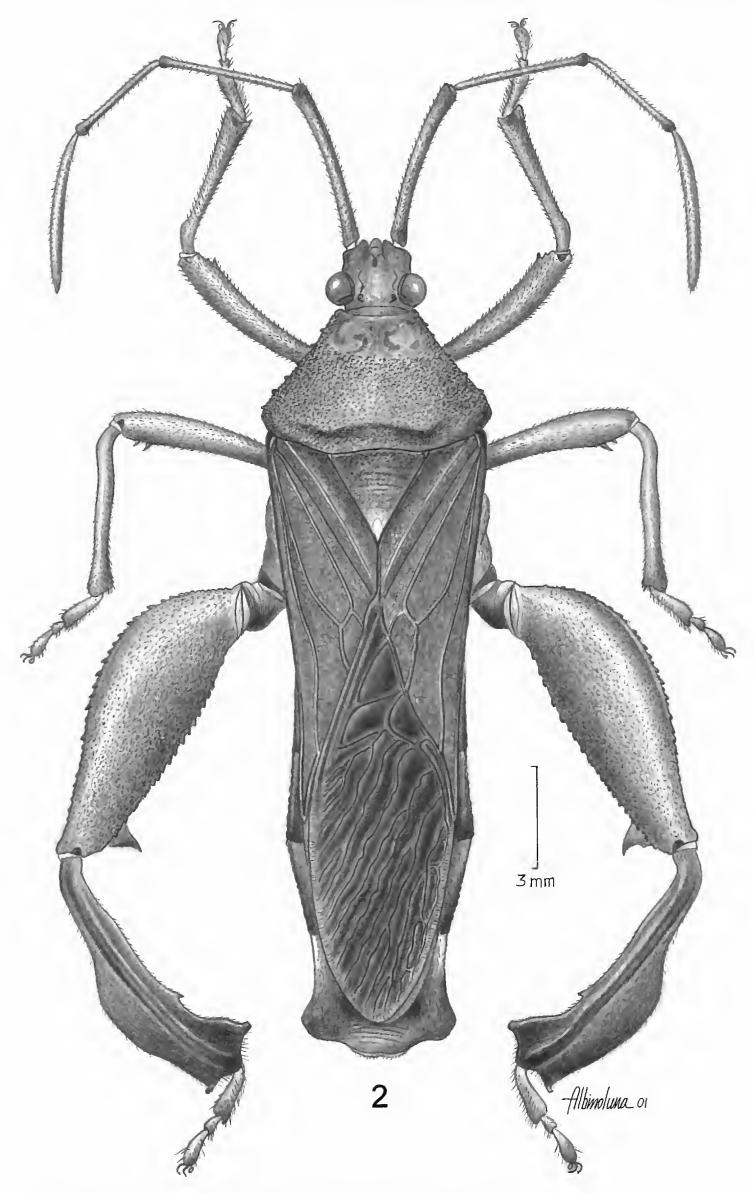


Figure 2. Dorsal view of Mictis sulawesiana Brailovsky, (male).

at most anterior or middle third of abdominal sternite VI, and with dorsal and ventral surface minutely tuberculate; dorsal surface uniseriately spinated from base to apex, and ventrally strongly granulated on one irregular row, with a large triangular subapical spine; fore and middle tibiae unarmed, sulcate, and slightly expanded at posterior third; hind tibia recurved, flattened, shorter than femora, with outer surface markedly expanded and apically armed with a subacute spine, and inner surface expanded with two spines, the subapical spine short and acute, and the apical spine robust. Scutellum: Triangular, with apex flat. Hemelytra: Macropterous, almost reaching apex of last abdominal segment. Abdomen: Connexival segments sulcate, with upper margin densely and irregularly denticulate; abdominal segment VII laterally expanded; abdominal sternite III laterally armed with single, stout tubercle; posterior margin of abdominal sternite V slightly elevated. Genital capsule: Posteroventral edge with small concavity at middle third.

*Measurements*.—Holotype male. Head length: 1.74 mm; width across eyes: 2.73 mm; interocular space: 1.52 mm; interocellar space: 0.69 mm; antennal segments lengths: I, 4.86 mm; II, 4.02 mm; III, 3.26 mm; IV, 4.56 mm. Pronotal length: 4.25 mm; width across frontal angles: 2.35 mm; width across humeral angles: 6.46 mm. Scutellar length: 2.66 mm; width: 2.88 mm. Hind femur length: 9.37 mm. Hind tibia length: 8.25 mm. Maximum width of abdomen: 5.47 mm. Total body length: 24.15 mm.

Female.—Unknown.

Discussion.—Mictis sulawesiana is related to M. riedeli and recognized by having the abdominal segment VII laterally expanded, antennal segments I to III pale orange yellow, outer and inner surface of hind tibia dilated (Fig. 2), male hind trochanter blunt without apical tubercle, posterior angle of connexival segments serrate without strong conical tubercles, and humeral angles obtuse. In Mictis riedeli, the abdomen is gradually narrowed with abdominal segment VII not laterally expanded, antennal segments I to III black, hind tibia with only the inner third expanded (Fig. 1), male hind trochanter with apical tubercle, posterior angle of connexival segments with large conical tubercle, and humeral angles angulate.

Etymology.—Named for its occurrence in the Sulawesi Islands.

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